

device would work, and any means of communication will work as well. The invention is not dependent on the type of connection with the device or user as long as data can be transferred from one place to another.

For closed system devices without complete operating systems, an area of non-volatile memory that can only be read or written to by the device firmware can be a secure storage area. On open devices with more functional operating systems, such as personal computers, an alternate method of establishing a secure area must be used. An example of such an alternate method is the creation of an encrypted file that can only be read by a tamper resistant software application or module.

The invention has been described above for audio files in particular, but is also applicable to other types of media files, such as video files, and corresponding media playback devices for playing back files of this type.

Accordingly, other embodiments are within the scope of the following claims.

What is claimed is:

1. A method for transferring one or more media files from a content server to a media playback device, comprising:

receiving a request of one or more media files to be transferred to a particular media playback device, the one or more media files having associated expiration rules;

obtaining information about the particular media playback device;

determining, based on the information about the particular media playback device, whether the particular media playback device has the capability to enforce the expiration rules associated with the one or more media files;

if the media playback device has the capability to enforce the expiration rules, formatting the requested one or more media files such that they can only be rendered by the particular playback device and transferring the formatted files and the expiration rules to the particular media playback device.

2. The method of claim 1, wherein the media files further have associated content rights and further comprising:

determining, based on the information about the particular media playback device, whether the particular media playback device satisfies the content rights associated with the one or more media files; and

if the particular media playback device does not satisfy the content rights, denying transfer of the one or more media files to the particular playback device.

3. The method of claim 1, wherein the media files further have associated content rights and further comprising:

obtaining information about a user account associated with the particular media playback device, the user account having associated usage rights;

determining, based on the information about the user account, whether the usage rights satisfy the content rights associated with the one or more media files; and

if the usage rights do not satisfy the content rights, denying transfer of the one or more media files to the particular playback device.

4. The method of claim 1, wherein the information about the particular media playback device includes a unique device identifier and device capabilities for playing media files

5. The method of claim 1, further comprising:

generating a current time stamp; and

transferring the current time stamp to a secure location on the media playback device.

6. The method of claim 1, wherein the expiration rules include a maximum number of playbacks for the one or more media files.

7. The method of claim 1, wherein the expiration rules include a relative expiration time for the one or more media files.

8. The method of claim 1, wherein the expiration rules include an absolute expiration time for the one or more media files.

9. A method for updating expiration rules for media files to be played on a media playback device, comprising:

receiving a request for updating expiration rules for one or more media files;

obtaining information about a particular media playback device;

obtaining current expiration rules for the one or more media files for which an update has been requested;

comparing the current expiration rules with expiration rules stored on the content server for the one or more media files to determine if the current expiration rules can be updated;

if the current expiration rules can be updated, transferring new expiration rules from a content server to the particular media playback device;

if the current expiration rules cannot be updated, requesting a user of the particular media playback device to perform an action before the current expiration rules can be updated; and

if the user performs the requested action, transferring new expiration rules from the

content server to the particular media playback device.

10. The method of claim 9, wherein the information about the particular media playback device includes a unique device identifier and device capabilities for playing media files.

11. The method of claim 9, wherein transferring new expiration rules from the content server comprises:

transferring the new expiration to a communication module that is operable to communicate with the playback device; and

transferring the new expiration rules from the communication module to the playback device.

12. The method of claim 9, wherein the current expiration rules include a maximum number of playbacks for the one or more media files.

13. The method of claim 9, wherein the current expiration rules include a relative expiration time for the one or more media files.

14. The method of claim 9, wherein the current expiration rules include an absolute expiration time for the one or more media files.

15. The method of claim 9, wherein updating the current expiration rules comprises:

generating a current time stamp; and

transferring the current time stamp to a secure location on the media playback device.

16. A method for playing a media file on a playback device, comprising:

receiving a user request to play the media file, the media file having one or more associated expiration rules;

reading the one or more expiration rules associated with the requested media file;

determining, based on the one or more expiration rules, if the media file has expired;

if the media file has expired, refusing to play the media file until one or more new

expiration rules have been obtained; and

if the media file has not expired, playing the media file to the user.

17. The method of claim 16, further comprising validating a storage medium on the particular
5 playback device.

18. The method of claim 16, wherein determining comprises:

determining if a maximum number of playbacks for the media file has been reached.

10 19. The method of claim 16, wherein determining comprises:

determining if a relative expiration time for the one or more media files has passed.

20. The method of claim 16, wherein determining comprises:

determining if an absolute expiration time for the one or more media files has passed.
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21. A content server for transferring media files to a playback device, comprising:

means for receiving a request of one or more media files to be transferred to a particular
media playback device, the one or more media files having associated expiration rules;

means for obtaining information about the particular media playback device;

20 means for determining, based on the information about the particular media playback
device, whether the particular media playback device has the capability to enforce the
expiration rules associated with the one or more media files;

25 means for formatting the requested one or more media files such that they can only be
rendered by the particular playback device and transferring the formatted files and the
expiration rules to the particular media playback device, if the media playback device has the
capability to enforce the expiration rules.

22. The content server of claim 21 wherein the media files further have associated content
rights and further comprising:

30 means for determining, based on the information about the particular media playback
device, whether the particular media playback device satisfies the content rights associated

with the one or more media files; and

means for denying transfer of the one or more media files to the particular playback device if the particular media playback device does not satisfy the content rights.

23. The content server of claim 21, wherein the media files further have associated content rights and further comprising:

means for obtaining information about a user account associated with the particular media playback device, the user account having associated usage rights;

means for determining, based on the information about the user account, whether the usage rights satisfy the content rights associated with the one or more media files; and

means for denying transfer of the one or more media files to the particular playback device if the usage rights do not satisfy the content rights.

24. The content server of claim 21, wherein the information about the particular media playback device includes a unique device identifier and device capabilities for playing media files

25. The content server of claim 21, further comprising:

generating a current time stamp; and

transferring the current time stamp to a secure location on the media playback device.

26. The content server of claim 21, wherein the expiration rules include a maximum number of playbacks for the one or more media files.

27. The content server of claim 21, wherein the expiration rules include a relative expiration time for the one or more media files.

28. The content server of claim 21, wherein the expiration rules include an absolute expiration time for the one or more media files.

29. The content server of claim 21, further comprising:

means for receiving a request for updating expiration rules for one or more media files;

means for obtaining information about a particular media playback device;

means for obtaining current expiration rules for the one or more media files for which an
5 update has been requested;

means for comparing the current expiration rules with expiration rules stored on the
content server for the one or more media files to determine if the current expiration rules can
be updated;

means for transferring new expiration rules from a content server to the particular media
10 playback device if the current expiration rules can be updated;

means for requesting a user of the particular media playback device to perform an action
before the current expiration rules can be updated if the current expiration rules cannot be
updated; and

means for transferring new expiration rules from the content server to the particular
15 media playback device if the user performs the requested action.

30. A playback device for playing media files, comprising:

means for receiving a user request to play the media file, the media file having one or
more associated expiration rules;

20 means for reading the one or more expiration rules associated with the requested media
file;

means for determining, based on the one or more expiration rules, if the media file has
expired;

25 means for refusing playback of the media file until one or more new expiration rules have
been obtained if the media file has expired; and

means for playing the media file to the user if the media file has not expired.

31. The playback device of claim 30, further comprising means for validating a storage
medium on the particular playback device.

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32. The playback device of claim 30, wherein the means for determining comprises:
means for determining if a maximum number of playbacks for the media file has been
reached.

5 33. The playback device of claim 30, wherein the means for determining comprises:
means for determining if a relative expiration time for the one or more media files has
passed.

10 34. The playback device of claim 30, wherein the means for determining comprises:
means for determining if an absolute expiration time for the one or more media files has
passed.